

### Abstract of the Disclosure

A first peak hold circuit holds a peak potential of a positive phase voltage signal output from a differential output amplifier, and a second peak hold circuit holds a peak potential of a negative phase voltage signal output from the differential output amplifier. An adding circuit adds an output signal of the first peak hold circuit and an output signal of the second peak hold circuit. A differential input amplifier amplifies and outputs a voltage difference between a reference voltage and an addition result voltage signal of the adding circuit. A current output circuit outputs a DC current based on an output voltage of the differential input amplifier. A current switch circuit converts a DC current to a pulse current so as to supply the pulse current to a laser diode.